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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
69/483,337	01/14/2000	Eric T. Kool	220.00040101	8254

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EXAMINER

CRANE, LAWRENCE E

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 12/31/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. <b>09/483,337</b>	Applicant(s) <b>E. T. Kool</b>	
	Examiner <b>L. E. Crane</b>	Group Art Unit <b>1623</b>	

**- THE MAILING DATE of this communication appears on the cover sheet beneath the correspondence address -**

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **--3--** MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be filed after six months from the date of this communication.
- If the prior for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 USC §133).

## Status

- ☒ Responsive to communication(s) filed on **-10/23/02 (amdt C) & 12/20/02 (hand delivered Figures)-**.
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claims **---44-48, 50-54 & 56-60---** are pending in the application. Claims **-1-43, 49, 55 & 60-63-** have been cancelled.
- Of the above claims **---[]---** are withdrawn from consideration.
- ☐ Claims **---[]---** is/are allowed.
- ☒ Claims **---44-48, 50-54 & 56-60---** are rejected.
- ☐ Claim(s) **---[]---** is/are objected to.
- ☐ Claims **---[]---** are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☒ The proposed drawings, filed on **-12/20/02-** are ☒ approved ☐ disapproved.
- ☐ The drawing(s) filed on **-[]-** is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119(a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) **-[]-**.
- ☐ received in the national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: **-[]-**.

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). **---[]---**
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other: **-[]-**

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Claims 1-43, 49, 55 and 61-63 have been cancelled, no claims have been added, and claims 44, 45, 50, 51 and 57 have been amended as per the amendment filed October 23 , 2002. No additional Supplemental Information Disclosure Statements (IDSs) have been received. The Figures hand delivered on December 20, 2002 have been reviewed by the draftsman and approved.

Claims 44-48, 50-54 and 58-60 remain in the case.

Examiner had a telephonic conversation with the attorney of record in this case on December 30, 2002. Upon reconsideration and careful study of the references cited below, and for the reasons given following the rejection over art below, examiner has concluded that only claims 50-54 are allowable, if modified in the manner indicated below.

Attorney of record indicated that she would file a interview summary in the case. Examiner considers the instant Office action a response to any comments attorney of record may make regarding patentability of claims 44-48 and 56-60 over prior art of record, and said Office action has been made in light of the technical definitions provided for by the King et al. reference (PTO-892 ref. R).

Claims 44-48, 50-54 and 56-60 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 44, 50 and 56 beginning at line 4, the terms "comprises" and "comprising" render the metes and bounds of the claim indefinite, particularly when said terms are used in reference to chemically modified starting materials and products where the noted terms imply

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the absence of a complete description of the structural features of said chemically modified starting materials and products.

Applicant's arguments filed October 23, 2002 have been fully considered but they are not persuasive.

5 Applicant argues that the terms "comprises" and "comprising" are an acceptable transitional term according to the MPEP. Examiner disagrees, arguing that the term "comprising" suggests that the definitions of reactants are inherently incomplete because said terms raise the question -- including what else? --, and thus render the claims  
10 inherently incomplete for failure to define all of the structural elements of the chemically reactive 3'- and 5'-substituents and/or the structural modifications of the terminal 3'- and 5'-nucleotide units.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section  
15 made in this Office action:

"A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent."
- 20 (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States."

Claims 44-48, 50-54 and 56-60 are rejected under 35 U.S.C. §102(b) as being anticipated by **Northwestern University '699** (PTO-  
25 1449 ref. AM).

Applicant is referred to the abstract at page 1, pages 13 and 17 and Figure 2 wherein the instant claimed invention has been anticipated.

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Applicant's arguments filed October 23, 2002 have been fully considered but they are not persuasive.

Applicant argues that the noted prior art fails because it is not directed to "a method of detecting a genetic polymorphism." Examiner respectfully disagrees and directed applicant's attention to the definitions of the terms "genetic polymorphism" and "point mutation" provided by the King et al. reference at pages 155 and 304, respectively. Examiner argues that a genetic polymorphism includes point mutations because a "genotype" (see p. 156, King et al.) includes point mutations, a variation the testing for which is specifically provided for by claim 24 of the **Northwestern University '699** reference. For this reason, examiner concludes that while applicant is correct that the prior art does not specifically claim "a method of detecting a genetic polymorphism," in light of the definitions provided by the King et al reference, examiner must conclude that the prior art actually reads on the instant claims.

Additionally applicant is respectfully requested to note that references AC (see abstract; bottom of columns 5-column 6; bottom of column 7-column 8) and AW (see p. 2369, bottom of column 1) each include anticipatory subject matter and are therefore effective equivalents of the noted reference cited in the art rejection supra.

Claims **50-54** would be allowable if the limitation of "less than 7 nucleotides" were also added to the newly added "wild-type polymorphism oligonucleotide probe" at lines 6-8 of claim **50**.

Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. §1.136(a).

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5 A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 C.F.R. §1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

10 Papers related to this application may be submitted to Group 1600 via facsimile transmission(FAX). The transmission of such papers must conform with the notice published in the Official Gazette (1096 OG 30, November 15, 1989). The telephone numbers for the FAX machines operated by Group 1600 are (703) 308-4556 and 703-305-3592.

15 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner L. E. Crane whose telephone number is 703-308-4639. The examiner can normally be reached between 9:30 AM and 5:00 PM, Monday through Friday.

20 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. James O. Wilson, can be reached at (703)-308-4624.


25 Any inquiry of a general nature or relating to the status of this application should be directed to the Group 1600 receptionist whose telephone number is 703-308-1235.

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LECrane:lec  
12/30/02

  
James O. Wilson  
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